

BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY GENES AND USES THEREOF

Abstract

The present invention relates to a first group of novel genes, here identified as "genomic address messenger" or "GAM" genes, and a second group of novel operon-like genes, here identified as "genomic record" or "GR" genes. GAM genes selectively inhibit translation of known "target" genes, many of which are known to be involved in various diseases. Nucleic acid molecules are provided respectively encoding 23,053 GAM genes, and 7,399 GR genes, as are vectors and probes both comprising the nucleic acid molecules, and methods and systems for detecting GAM and GR genes and specific functions and utilities thereof, for detecting expression of GAM and GR genes, and for selectively enhancing and selectively inhibiting translation of the respective target genes thereof.